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## CURRICULUM VITÆ

Professor - ENIB / R&D Director (CTO) Naval Group Pacific

### HIGHER EDUCATION

2012	<b>Habilitation</b> <sup>1</sup> in Computer Science, Université de Bretagne Occidentale (UBO), France
2005	<b>PhD</b> in Computer Science, UBO, France
2002	<b>MSc</b> in Computer Science, Université Rennes I, France
2002	<b>Engineer</b> , National Engineering School (ENIB), France

### EXPERIENCE

2023 - present	<b>R&amp;D Director (CTO)</b> , Naval Group Pacific
2018 - present	<b>Professor</b> , ENIB
2021 - 2023	<b>CNRS delegation</b> , IRL 2010, Australia
2018 - 2020	Professor (by courtesy), University of Miami.
2007 - 2018	<b>Associate professor</b> , ENIB.
2006 - 2007	Assistant associate professor, UBO
2005 - 2006	Assistant associate professor, ENIB

### RESEARCH

<b>Topics :</b>	Artificial Intelligence, Virtual Reality, Machine Learning, Human Factors
<b>Applications :</b>	Robotics, Video games, Clinical Decision Support, Virtual Environment for Learning
<b>Supervisions :</b>	19 PhD + 26 MSc + 3 engineers + 2 Post-doc
<b>Management :</b>	Research teams leader (10 staff members) and programs leader (50 staff members)

### TEACHING

<b>Main :</b>	Master 2 program leader during 10 years (computer science)
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### COMPETITIONS / AWARDS

2023	<b>1<sup>st</sup> RoboCup@Home</b> <sup>2</sup>
2022	<b>1<sup>st</sup> RoboCup@Home</b>
2022	Elected " <b>French of the year in Australia</b> "
2021	<b>3<sup>rd</sup> RoboCup@Home</b>
2020	<b>1<sup>st</sup> RoboCup@Home Education</b>
2017	Finalist Angry Birds AI - IJCAI 2017
2016	Finalist Angry Birds AI - IJCAI 2016
2015	<b>1<sup>st</sup> Angry Birds AI - IJCAI 2015</b>
2014	Semi-Finalist Angry Birds AI - ECAI 2014
2013	Finalist Angry Birds AI - IJCAI 2013
2013	<b>1<sup>st</sup> Man vs Machine Challenge - IJCAI 2013</b>

1. Highest degree in French academic education, awarded after passing the tenure process, qualifies for full professorship

2. == world champion in social robotics

## CONTRACTS

Institutional EU, ANR, AID (defense), USA funding, FUI ( $\approx 500$  K €+ PhD salaries)  
Industrial CIFRE, Expertise, Contract ( $\approx 1$ M €+ PhD salaries) :  
ArianeGroup, Thales, Segula, Ericsson, Naval Group

## PATENT

2021 "Infobuna" : software for disease detection and grading of coffee using photos (num  
IDDN.FR.001.170002.000.S.P.2021.000.2100)

## MAIN PUBLICATIONS

Rank A : Delamarre A., Shernoff E., Buche C., Frazier S., Gabbard J. and Lisetti C. (2021).  
The Interactive Virtual Training for Teachers (IVT-T) to Practice Classroom Behavior  
Management. *International Journal of Human - Computer Studies*. 152.

Rank A : Cazorla R., Pionel L., Papadakis P. and Buche C. (2021). Bottleneck Identification to  
Semantic Segmentation of Industrial 3D Point Cloud Scene via Deep Learning. *Inter-  
national Joint Conference on Artificial Intelligence (IJCAI)*. pages 4877-4878

Rank A : Delamarre, A., Buche C. and Lisetti C. (2021). Modeling Emotions for Training in  
Immersive Simulations (METIS) : a Cross-Platform Virtual Classroom Study. *IEEE  
International Symposium on Mixed and Augmented Reality (ISMAR)*. pages 78-83

Rank B : Cazorla R., Pionel L., Papadakis P. and Buche C. (2022). Reducing domain shift in  
synthetic data augmentation for semantic segmentation of 3D point clouds. *IEEE In-  
ternational Conference on Systems, Man, and Cybernetics (SMC)*.

Rank B : Walleign S., Polceanu M., Jemal T. and Buche C. (2019). Coffee Grading with Convolu-  
tional Neural Networks using Small Datasets with High Variance. *International Confe-  
rence on Computer Graphics, Visualization and Computer Vision (WSCG)*, pages 113-  
120

## Jury

Habilitation : Reviewer (1)  
PhD : Reviewer (6), President (4), Member (13)

## MAIN PRESS

2022 : France Inter interview "la matinale" on interactive robotic  
2021 : Magazine "l'Usine Nouvelle" published an interview on my research activities  
2018 : Magazine "Planet Robots" published an article on my research activities (2 pages)